Montana Department of
ENVIRONMENTAL QUALITY

Brian Schweitzer, Governor

P.O. Box 200901 • Helena, MT 59620-0901 • (406) 444-2544 • www.deq.mt.gov

September 22, 2006

WARNING LETTER
CERTIFIED MAIL
7005 0390 0002 7647 9689

Mr. Jon Nickel
Asarco Inc.
East Helena Plant
P.O. Box 1230
East Helena, MT 59635

Subject: August 31, 2006, Compliance Evaluation Inspection - Asarco East Helena Plant

Dear Mr. Nickel:

Enclosed is my inspection report and digital photographs taken of Asarco's Dross Plant and Bullion Casting buildings, Direct Smelt building, Mist Precipitator building, Hot Cottrell building, Bailey building/Scrap metal lay-down area, and the former Sinter Plant location. Please review this report and enclosed documents carefully.

As we discussed, I observed a violation of the Administrative Rules of Montana (ARM) during my inspection. **ARM 17.53.602** adopts, by reference, the standards applicable to generators of hazardous waste as set forth in **40 CFR 265.1101(c)(1)(ii)** that states "Owners or operators of all containment buildings must maintain the level of the stored/treated hazardous waste within the containment walls of the unit so that the height of any containment wall is not exceeded".

During the inspection, I observed that waste contained in the Bailey building exceeded the height of the Lego blocks. (See photo #012 in the attached photolog).

Therefore, the Department of Environmental Quality (DEQ) requires that within **5** days of receipt of this letter, Asarco submit to this office written and photographic documentation to bring its hazardous waste storage practices in the Bailey building into compliance with the above citations. The documentation shall include, but not be limited to:

1. Photographic and written evidence that the waste material in the Bailey building has been properly stored within the containment (Lego block) wall.

I want to thank you for the time spent during our inspection. If you have any questions or need further assistance, please feel free to contact me at (406) 444-5852, or e-mail me at ijohnson@mt.gov.

Sincerely,

Iver L. Johnson
HW Specialist
WUTM Bureau

Enc: Field Investigation Report with photolog

cc: Linda Jacobson, EPA Region 8, 999 18th Street, Suite 300, Denver, CO 80202-2466

MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY
Permitting and Compliance Division
Waste & Underground Tank Management Bureau

FIELD INVESTIGATION REPORT

SITE: Asarco - East Helena Plant

EPA ID # MTD006230346

LOCATION: East Helena

DATES & TIMES: August 31, 2006 @ 9:45 am

INSPECTION LENGTH: 3 Hours

CONTACT: Jon Nickel, Asarco Representative

INSPECTION TEAM: Iver L. Johnson

PURPOSE: Compliance Evaluation Inspection

REPORT PREPARED BY: Iver L. Johnson

BACKGROUND: The initial purpose of this evaluation was to inspect and verify that the decontamination, waste removal, and demolition activities associated with the razing of the Sinter Plant was conducted in accordance with the Site Work Plan submitted to the Department on February 14, 2006.

The information gathered will be useful to the Department in monitoring Asarco's continuing goal to remove, store, and properly dispose or recycle all remaining hazardous wastes and recyclable materials from identified process units located within Asarco's East Helena Plant. Mr. Johnson arranged with Mr. Nickel to conduct this inspection on this date and time.

In addition, Ms. Linda Jacobson, Region VIII EPA Inspector, accompanied Mr. Johnson and conducted an oversight inspection evaluation on Mr. Johnson's field activities at the site.

RESULTS OF THE INSPECTION: Upon arrival at the East Helena facility, we met with Mr. Nickel in his office. I informed him of the purpose of my inspection as described above. In addition, I told Mr. Nickel that I wanted to inspect and photograph the Dross Plant and Bullion Casting buildings, Direct Smelt building, Mist Precipitator building, Hot Cottrell building, Bailey building/Scrap metal lay-down area, and the former Sinter Plant location.

As we entered the facility grounds Mr. Nickel pointed out to Ms. Jacobson the "Xs" spray painted on the Laboratory & Adjacent Storage buildings and other structures throughout the plant. Mr. Nickel told us that a "Green X" means that the structure is scheduled for demolition. A "Red X" spray painted on a structure means that the unit will not be demolished and will remain in place for the time being.

Dross Plant & Bullion Casting buildings:

I observed that the demolition contractor had completed the dismantling of the bullion casting building at the time of the inspection. In addition, several exterior panels from the west and south walls of the Dross Plant had been removed. Some of the panels, which are destined for metal recycling, were stacked in an adjacent area to the south of the building. There was evidence that some hazardous waste material had been cleaned up in the Dross Plant and taken to the Bailey building for future disposal. (See photos #001, 002, 003, 004, 005 and 006 in the attached photolog).

Direct Smelt Building:

I inspected the Asbestos Containing Material (ACM) storage area in the Direct Smelt building. ACM that was stored in the Bailey building has now been re-located into this building. No RCRA or Asbestos violations were observed here at the time of the inspection. (See photo #007 in the attached photolog).

A 20-yard roll-off containing High Density Sludge (HDS) was stored just outside the entrance into the Direct Smelt building. The container was properly covered and marked with a yellow hazardous waste label. The label bore an accumulation start date of August 24, 2006. (See photos #008 and 009 in the attached photolog).

Mist Precipitator and Hot Cottrell buildings:

As the inspection team was making its way across the facility grounds to the Bailey building, I observed that the demolition contractors were in the process of tearing down the acid plant scrubbers and associated support towers and duct work.

In addition, galbestos panels from the Mist Precipitator and Hot Cottrell buildings were being removed and stored at galbestos lay-down area to the east of the Bailey building. I noted that the paneling was not positioned at an angle so as to not allow standing water to collect on the surfaces on the panels. (See photos #010 and 011 in the attached photolog).

Bailey Building/Scrap Metal Lay-Down area:

Demolition debris from the Sinter plant, Dross plant and other process units are being stored in the Bailey Building pending disposal into the CAMU. At the time of the inspection, I noted that debris stacked in the building exceeded the height of the Lego blocks, which is in direct conflict with past guidance given by the Department to Asarco

representatives relative to how high the debris can be stored in this building. (See photo #012 in the attached photolog).

In addition, I inspected the Scrap metal lay-down area to the west of the Bailey building. The scrap metal came from the demolition of the Sinter plant, Dross plant and other process units. I observed several piles of scrap metal separated by concrete "jersey barriers" due to their recycling characteristics. The scrap metal was free of hazardous waste dust and ready for transport via railroad cars. I also saw three 20-yard roll-offs. Two of the roll-offs were empty. One held recyclable copper wire. (See photo #013 in the attached photolog).

Sinter Plant:

I observed that the decontamination and demolition of the Sinter Plant had been almost completed as outlined in Site Work Plan for this location. I took digital photographs to document the "footprint" of the Sinter Plant. Mr. Nickel pointed out to Ms. Jacobson and I that Asarco plans on leaving the concrete/steel abutments and adjacent asphalt road covering in place in the "footprint" to act as a permanent barrier. I noted that the area had recently been vacuumed and it appeared that the surface area contained no hazardous waste dust or residue. (See photos #014 and 023 in the attached photolog).

I walked down the length of the "Larry Pit" which runs parallel to the Sinter plant "footprint". I observed areas on the pit walls that were exposed to the elements or in need of further clean-up. Mr. Nickel told me that Asarco plans on covering up the exposed dirt, but for the most part, leave the "Larry Pit" as is to act as a permanent barrier. (See photos #015 and 016 in the attached photolog).

I also noted that several holes and a concrete trench still remain within the "footprint" (ie. elevator shaft, Sinter plant basement filled with water, sump pit and two other openings) that could allow storm water to seep into the soil. Mr. Nickel told me that Asarco wanted to fill these openings with fumed slag to prevent stormwater seepage in the near future. (See photos #017, 018, 019, 020, 021, 022 and #024 in the attached photolog).

At the conclusion of the facility inspection, I inspected the following hazardous waste manifests in Asarco's lunch room with Mr. Nickel:

- 1,820 pounds of D006, D007, D008, D010 and D011 waste was sent out on Manifest #R0153 on 8/18/06 and received by the TSDF on 8/21/06. Smith Transportation was Transporter #1 and Clean Harbors was the TSDF facility.
- A 20-yard roll-off bin of D004, D006 and D010 waste was recently sent out on Manifest #00628. No signed TSDF copy was available.

All the manifest and LDR paperwork appeared to be in order at the time of inspection. After the exit interview I told Mr. Nickel that I would send a copy of the digital photos taken during the inspection with my report.

He asked me at this time to talk to Envirocon's on-site demolition manger and explain to him the importance of storing the waste debris in the Bailey building only to the height of the Lego blocks. I proceeded to meet with Mr. Graham McMillian and explained to him the Department's position on storing waste in the Bailey building.

Note: A copy of this report and photolog is filed in the Department's Asarco facility folder.

ADDENDUM: On September 12, 2006, Mr. Amicucci and I went out to the area where the galbestos siding was stored. Looking through the fence, we noted that the galbestos panels were re-positioned at an angle so as to not allow standing water to collect on the surfaces on the panels.

WASTE MINIMIZATION REVIEW: None discussed.

RECOMMENDATIONS: Continue to adhere to Montana's hazardous waste and Asbestos management regulations.

Sept 20, 06
Date of Inspection Report

Iver L. Johnson
Hazardous Waste Specialist

MT DEQ P&C DIVISION WUTM BUREAU
Photolog-asarco-17.doc

PHOTO #: ASARCO_06243-001
SUBJECT: Compliance Inspection
LOCATION: East Helena, MT.
COUNTY: Lewis & Clark
DATES: August 31, 2006
WEATHER: Sunny
PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (sig.) Iver L. Johnson
EPA WITNESS: Linda Jacobson
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

This photo shows the beginning stages of Phase II demo of the bullion casting and dross buildings on August 22, 2006.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-002

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.) _____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

This photo shows the same building, as in photo #001, nine days later.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-003

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.) _____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking at a bigger picture of the bullion casting and Dross Plant in the beginning stages of demolition.

T DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-004

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.) _____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking at another view of the demolition of the bullion casting building.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-005

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.) _____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Standing inside the Dross Plant, this photo shows the removal of the paneling on the south side of the plant. The paneling can be recycled as scrap metal.

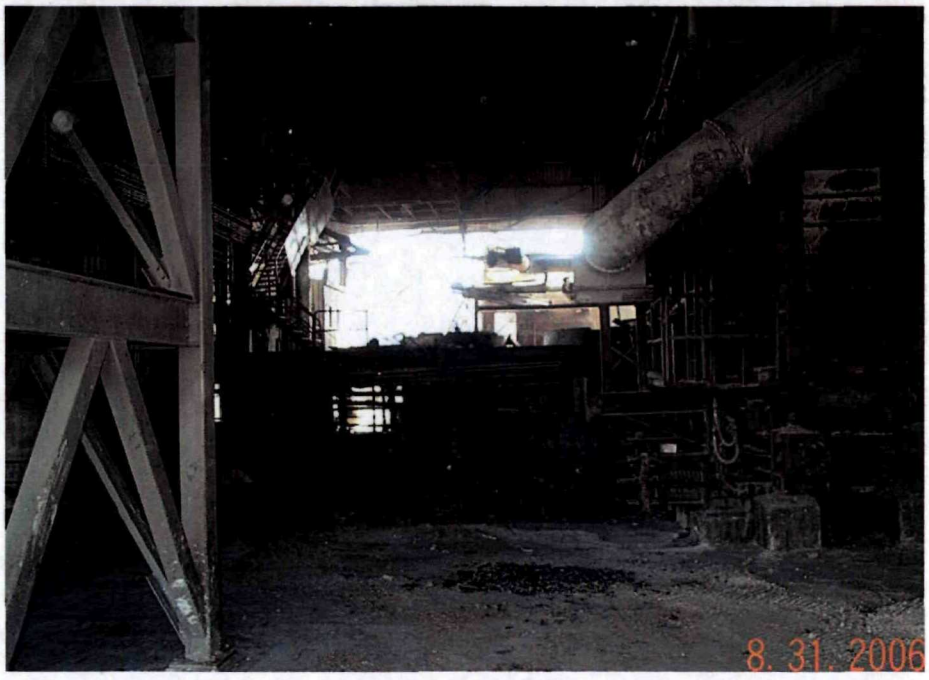
MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-006

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.) _____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Another view from inside the Dross Plant. looking north to the bullion casting building demolition.

Note the dross reverb furnace and associated duct work to the right of the photo.



MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-007

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking an ACM stored in the Direct Smelt building that was re-located from the Bailey building.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-008

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Located just outside the Direct Smelt building entrance a 20-yard roll-off containing High Density Sludge (HDS) was awaiting disposal. It was properly covered and marked with a yellow hazardous waste label.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-009
PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

The yellow hazardous label on the 20-yard roll-off bore an accumulation start date of August 24, 2006.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-010

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

At the time of the inspection, the demolition contractors had already dismantled the acid plant scrubbers and associated support towers and duct work.

This photo shows some of that material in the process of being cut-up into smaller pieces for future scrap metal recycling.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-011

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

This photo shows the area and two piles of galbestos panels were being stored uncovered on site.

Note: In a letter to Asarco, panels from the Mist Precp and Hot Cottrell buildings can be stored here as long as they are placed on an angle so as to not allow standing water to collect on the suraces.

At the time of the inspection on Aug. 31, 2006, the panels were not placed on an angle.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-012

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Material destined for disposal in the CAMU is stored in the Bailey Building.

Note that the material is stored higher than the retaining wall as indicated by the red line. This is a recurring problem as previously shown in photos taken on August 22, 2006.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-013

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking at the scrap metal lay-down area west of the Bailey building. The scrap metal is sized and sorted into various piles, which will eventually be loaded into railcars for metal recycling.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-014

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

This photo shows the concrete and steel abutments still protruding above the floor at the Sinter Plant footprint.

The area was recently vacuumed to remove loose dust and other small debris.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-015

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

This photo shows the length and width of the "Larry Pit" at the former Sinter Plant.

Note that portions of the pit are exposed to the elements.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-016

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

This photo shows a close-up of the south wall of the Larry Pit. At the time of the inspection loose waste material could be removed by hand indicated by the arrows.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-017

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking at standing water in the former basement of the Sinter Plant.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-018

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)_____
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Next to the basement shown in photo #017 is another hole that appears dry at the time of the inspection.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-019

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking at an elevator shaft that was part of the Sinter Plant on the east end of the footprint.

The open shaft still contains waste material and allows storm water to collect on the bottom of the hole.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-020

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Running the length of the Sinter Plant footprint is this long trench.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-021

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking at the sides and bottom of the trench as described in the previous photo. It appears that the trench bottom is made of concrete.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-022

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking at an open pit on the west end of the Sinter Plant footprint that once held run-off water and material from the process unit. At the time of the inspection was pit was dry.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-023

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

The photo shows the concrete top of the Sinter Plant footprint and asphalt covering to the south of the footprint.

MT DEQ WUTM BUREAU

PHOTO #: ASARCO_06243-024

PHOTOGRAPHER: Iver L. Johnson
PHOTOGRAPHER (int.)
CAMERA: Kodak DC5000 Zoom Digital Camera
FILM TYPE: N/A
NEGATIVE LOCATION: N/A
EXPLANATION:

Looking at another view of the former elevator shaft and other openings in the floor at the east end of the Sinter plant footprint.